

ABSTRACT

A charge pump circuit includes MOSFETs and MOS capacitors formed on the same substrate. Each of the MOS capacitors has a multiplicity of first electrodes formed in one region of the substrate, insulating layers formed on/above respective substrate regions between neighboring first electrodes, each layer covering at least the respective substrate region, and a multiplicity of second electrodes formed on/above the respective insulating layers. The MOS capacitors have improved frequency response.